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(54) PORTABLE ELECTRONIC DEVICE HOUSING INCLUDING HINGE

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2) **U.S. Cl.**

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(58) Field of Classification Search

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

5,835,852			Bundgardt
7,565,720			Ligtenberg
2006/0270469	A1*	11/2006	Godston et al 455/575.3
2010/0075717	A1	3/2010	Ou
2013/0083275	A1*	4/2013	Al et al 349/106

FOREIGN PATENT DOCUMENTS

EP 1843052 A1 10/2007

OTHER PUBLICATIONS

Extended European Search report mailed Mar. 19, 2012; in corresponding application No. 11185847.8. Examination report mailed Sep. 11, 2013, in corresponding European patent application No. 11185847.8.

* cited by examiner

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(57) ABSTRACT

A portable electronic device includes a hinge assembly comprising an axle, the hinge assembly coupling a first mating end of a first housing to a second mating end of a second housing, the second housing being movable relative to the first housing from an open position in which the axle is in a first position near to the first mating end and the second mating end and a folded position in which the axle is in a second position spaced from the first mating end and the second mating end such that the first mating end and the second mating end are movable toward one another to move the portable electronic device to a partially open position for clipping to an object; and a processor in electrical communication with electrical components in one of the first housing and the second housing.

15 Claims, 15 Drawing Sheets

